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Political Role of Dams in Developing Countries: Ethiopia as a Case Study

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Global climate change is diminishing the available clean water supply, while the growing world population and the rising living standards in many countries are increasing the demand for water. As a result, the economic value of water is on the rise, changing the perception of water from a resource that is common property into an economic product that people consume according to market forces. Development plans, which seek to allocate water from one place to another, effect social and environmental change, both in the region to where the water is allocated, as well as in the region from where the water is taken. From this, it can be argued that any intervention in the water cycle is always political, as it destabilizes the social and environmental foundations of all regions.[1]

Today, water supply is a core responsibility of a government to its citizens. Between the state and its citizens exists a "Hobbesian form of hydraulic contract," in which citizens give the government legitimization to manage all national water resources. By controlling the allocation

[1] Erik Swyngedouw, "The Political Economy and Political Ecology of the Hydro-Social Cycle," *Journal of Contemporary Water Research and Education*, no. 142 (2009): 56-60.

of water, governments maintain their presence in the people's lives while establishing a dependence on its supply systems.[2]

Many politicians present water utilization schemes as a vital national need for a biodegradable resource, while downplaying the importance of the traditional uses of the resource, by portraying them as obstacles for national economic growth. The investment in dams is one of the main examples of such water management development projects. The importance of dams is derived from the different ways that they can influence water policy. For instance, they enable a steady supply of water for private consumption and industrial needs. Additionally, they can provide water supply for agricultural irrigation purposes and can be used to produce hydroelectricity.

Ethiopia Water Development Schemes

Ethiopia's location in East Africa, lying on continental and intercontinental trade routes, is a primary reason for this country's ethnic heterogeneity. The country's current borders were established by the end of the 19th century, when Emperor Menelik II (1889-1913) and his army conquered the lands in the south, expanding the Ethiopian borders. A side effect of the military campaign was that millions of people from more than 70 different ethnic groups became subject to the Emperor's control.[3] A century later, a civil war tore apart Ethiopia from 1974-1991. The challenge facing the coalition of parties which took control of the country by the war's end (Ethiopian People's Revolutionary Democratic Front -EPRDF), was to maintain the borders of the Ethiopian state while preventing different ethnic groups from demanding their own national state, as in the case of Eritrea.[4] The solution was found in establishing the Federal Democratic Republic of Ethiopia (FDRE), which divided the country into nine regions and two more city-states, based upon ethnic divisions. In 1994 the government finished writing the Ethiopian constitution and the FDRE was established.

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[2] Anthony Turton and Richard Meissner, "The Hydro-Social Contract and its Manifestation in Society: A South African Case Study," African Water Issues Research Unit, Pretoria University, (2003).

[3] John Markakis, *Ethiopia -The Last Two Frontiers* (Oxford: James Currey, 2011), 90-92.

[4] Eritrea is located in the North East border of Ethiopia. The region was annexed to Ethiopia in 1950 after seventy years of Italian and British rule. During the civil war in Ethiopia from 1974-1991, the Eritrean People's Liberation Front (EPLF) helped rebel forces overthrow the Ethiopian government. After the war, the EPLF declared its independence and received international recognition in 1993.

Ethiopia as a country does not suffer from water scarcity. The country receives up to 980 billion M^3 of rain annually, enough to provide up to 1707 M^3 of water per person. However, most of the rain is concentrated in the Ethiopian highlands, while regions in the east and south remain dry. The populations of these regions depend on the water that flows down several rivers from the highlands into downstream countries which include Kenya, Sudan, Somalia and Egypt. The Ethiopian economy is heavily based on rain-fed agriculture which employs close to 70% of the population and constitutes more than 40% of the country's GDP. However, climate instability in the Horn of Africa over the past few decades has resulted in intense floods. Consequently, these floods are followed by severe droughts which have had a direct impact on agricultural production by local farmers, and which have resulted in poor economic performance.[5]

Over the past several decades, the government has promoted a development plan which seeks to utilize the large amount of water flowing down from the Ethiopian highlands, as part of its' plan to deal with climate instability. Central to this plan is the construction of several medium to large dams on the rivers which will accumulate certain amounts of water before it flows to neighboring countries. This process of conserving water will help the government address three main economic and social needs of the country:

- Stabilize the water supply for consumption by local population. In 2011 only 21% had access to water through a tap.[6]
- Produce up to 10,000 MW of hydroelectricity by 2015, as part of the goal to enlarge private consumption and stabilize electricity distribution for industrial development.[7] Additionally, the electricity produced by the dams will relieve the country's dependence on imported petroleum for electricity, enabling it to become an energy provider to its

[5]Charles Miranda, "Ethiopia gripped by drought the worst in 50 years", News.com.au, January 23, 2016, accessed January 2,2016, http://www.news.com.au/world/africa/ethiopia-gripped-by-drought-the-worst-in-50-years/news-story/e2ff0f7177744e95deb11cad71595184.

[6]USAID, "Ethiopia: Water**,"** last modified January 27, 2016, http://www.usaid.gov/ethiopia/water-and-sanitation,2/12/14.

[7] Pat Adams, "International Development Banks, Large Hydropower, and the Environment in Ethiopia": *Environmental Policy Update 2012: Development Strategies and Environmental Policy in East Africa* (Waterville, Maine: Colby Environmental Policy Group, 2012): 204-205.

neighbors in East Africa, establishing its stance as a regional power, and maintaining its political and economic interests in these countries for the future.

- Allocate water for agriculture development schemes promoted by the government. As part of Ethiopia's "Growth and Transformation Plan" from 2010, more than 3 million hectares of land will be leased to private and public agriculture investors. Data collected by the African Development Bank (AFDB) for the years 2013/2014, show that Ethiopia demonstrated a 10.3% growth, making it the eleventh straight year of steady economic growth. The agricultural sector constituted 40.2% of the national GDP (second to the service sector with 46%), growing by 5.4 percent. Seventy percent of the export of the country was agricultural products, resulting in 3.25 billion dollars net income.[8] These industrial agriculture schemes need a stable supply of water year long. The dams will accumulate the water in order to allocate them to the fields which are transformed into agriculture projects.[9]

Nevertheless, the economic and social advantages that come from these water development plans are accompanied by internal political consequences. The irrigation plans are divided into three separate schemes according to their size. Small sized plans cover land up to 200 hectares, medium sized plans cover lands up to 3000 hectares, and large size plans covering lands bigger than 3000 hectares. A majority of the medium and large irrigation plans will be under the control and management of government agencies and officials.[10] A recent report showed that 80% of all lands leased out to investors in Ethiopia in recent years are located in lowland regions, principally Benishangul-Gumuz, Gambella and SNNPR.[11] According to Mosely, there are several groups living on these lands that are challenging the legitimacy of the central

[8]AFDB, "AFDB and Ethiopia, Partnering for Inclusive Growth", *External Relations and Communication Unit*, Tunisia, 2013, 4.
[9]"Growth and Transformation Plan (GTP)-2010/11-2014/15," Ministry of Finance and Economic Development (MoFED), Addis Ababa, (September 2010), 19-20, 26.
[10] Seleshi Bekele Awulachew, Aster DenekewYilma, Makonnen Loulseged, et. al., "Water Resources and Irrigation Development in Ethiopia," Working Paper 123, International Water Management Institute (2007), 5.
[11]James Keeley, Wondwosen Michago Seide, Abdurehman Eid, et. al., *Large-Scale Land Deals in Ethiopia: Scale, Trends, Features and Outcomes To Date* (London: IDRC and IIED, 2014), 25.

government.[12] As such, they see the building of the dams as another government policy aimed at establishing control and presence on their lands like many previous policies promoted by Ethiopian rulers since the conquest of these territories by Emperor Menelik II.

By controlling the "water tap," as well as the way the land is being used, the government is able to gain power and influence in these regions. By changing the traditional usage of lands, it is transforming the socio-economic reality of local populations living on these lands and undermining local opposition groups who are protesting the extent of federal government control and management of the lands. Likewise, the government's control of water and energy distribution creates local population and small businesses dependence on the government. Government involvement in these regions promotes economic integration of local populations into the national economy. On the regional level, the building of the Renaissance Dam on the Blue Nile has created ongoing tension between Ethiopia and the downstream countries of Egypt and Sudan, who depend on the Nile water for their subsistence. They fear the dam will reduce the amount of water they receive. Nevertheless, in the past year the three countries have managed to reach an understanding for a joint approach towards the future regional water supply.[13]

In conclusion, the political power rooted in the control of the water resources has been used by past and present regimes. The Ethiopian government's decision to exploit its vast water resource potential is another example of the social, economic, and political power embedded in the control and management of water resources.

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[12] Jason Mosley, "Peace, Bread and Land Agriculture Investments in Ethiopia and the Sudans," Chatham House, Africa Program (January 2012).

[13] *Al-Jazeera,* "Egypt, Ethiopia, Sudan Sign New Deal on Nile Dam," last modified December 30 2015, date accessed February 9, 2016 http://www.aljazeera.com/news/2015/12/egypt-ethiopia-sudan-sign-deal-nile-dam-151230105650388.html.